Name:

at1113exam: Expand, factor, and solve quadratics (v324)

1. Expand the following expression into standard form.

$$(5x + 9)(5x - 9)$$

2. Expand the following expression into standard form.

$$(3x + 8)(2x + 7)$$

3. Solve the equation.

$$(9x + 7)(6x + 5) \;=\; 0$$

4. Expand the following expression into standard form.

$$(7x + 5)^2$$

5. Factor the expression.

$$25x^2 - 9$$

6. Solve the equation with factoring by grouping.

$$15x^2 + 18x + 10x + 12 \;=\; 0$$

7. Solve the equation.

$$7x^2 + 14x - 37 \;=\; 4x^2 - 5x + 3$$

8. Factor the expression.

$$x^2 - 10x + 21$$